

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2003-0047

FOR  
SUGARLAND FARMS, LLC  
FORMER SPRECKELS SUGAR COMPANY FACILITY  
YOLO COUNTY

The Discharger shall submit reports required by this Monitoring and Reporting Program (MRP) and the Standard Provisions and Reporting Requirements dated 1 March 1991 pursuant to Section 13267 of the California Water Code. Failure to submit the required reports can result in the imposition of civil monetary liability. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

**GROUNDWATER MONITORING**

The Discharger shall sample groundwater at facility groundwater monitoring wells MW-1, 1A, 9, 9A, 10, 14 and 15. The Discharger shall collect samples from the groundwater monitoring wells as specified in Table 1. Sample collection shall follow standard EPA protocol.

TABLE 1 - GROUNDWATER MONITORING PROGRAM		
<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Groundwater Elevation	Feet (100ths), MSL	Semi-Annually
Specific Conductance	µmhos/cm	Semi-Annually
pH	Number	Semi-Annually
Turbidity	Turbidity Units	Semi-Annually
Monitoring Parameters		
Ammonia	mg/l	Semi-Annually
Bicarbonate as CaCO <sub>3</sub>	mg/l	Semi-Annually
Calcium	mg/l	Semi-Annually
Chloride	mg/l	Semi-Annually
Hardness as CaCO <sub>3</sub>	mg/l	Semi-Annually
Nitrate as Nitrogen	mg/l	Semi-Annually
Sodium	mg/l	Semi-Annually
Total Dissolved Solids	mg/l	Semi-Annually
Total Fixed Dissolved Solids	mg/l	Semi-Annually
Total Organic Carbon	mg/l	Semi-Annually

The Discharger shall measure the water level in each monitoring well (in feet and hundredths, MSL) and determine groundwater gradient and direction at least semi-annually, including the times of expected highest and lowest water level elevations for the respective groundwater body. Groundwater elevations

shall be measured for a given groundwater body within a period of time short enough to avoid temporal groundwater flow variations which could preclude accurate determination of groundwater gradient and direction.

### REPORTING

The Discharger shall report field and laboratory test results in semi-annual monitoring reports. The Discharger shall submit the semi-annual monitoring reports to the Board by **15 July** and **15 January**. The Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. A discussion of the monitoring results shall precede the tabular summaries.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional engineer or geologist (or their subordinate) and signed by the registered professional.

Each semi-annual report is to include the following information:

- (a) a discussion of the monitoring results and compliance with this MRP and the WDRs;
- (b) tabulated **cumulative** monitoring data including depth to groundwater measurements, groundwater elevations above mean sea level, groundwater analytical data;
- (c) a groundwater contour map prepared using groundwater elevation data that shows the hydraulic gradient, flow direction and estimated flow velocity;
- (d) a copy of the laboratory analytical reports and chain of custody; and
- (e) the status of PCC waste removal including amount removed since the previous semi-annual report and the amount still remaining at the site.

The results of any monitoring done more frequently than required at the locations specified in the MRP shall also be reported to the Board.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: \_\_\_\_\_  
THOMAS R. PINKOS, Executive Officer

\_\_\_\_\_  
14 March 2003

Date

WLB

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0047

WASTE DISCHARGE REQUIREMENTS  
FOR  
SUGARLAND FARMS, LLC  
FORMER SPRECKELS SUGAR COMPANY FACILITY  
YOLO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board or Regional Board) finds:

1. Sugarland Farms, LLC (hereafter Discharger) owns and operates the former Spreckels Sugar Company Facility (facility) in Woodland, Yolo County. The facility was formerly owned by Imperial Sugar Company and formerly operated by Holly Sugar Corporation doing business as Spreckels Sugar Company. The facility operated from 1937 until the end of the year 2000 engaged in the manufacture of sugar from sugarbeets. Sugar handling, packaging and distribution operations continued from 2001 until September 2002 under previous Waste Discharge Requirements (WDRs) Order No. 5-01-264 at which time the facility property was sold to the Discharger.
2. The property owned by the Discharger covers approximately 230 acres just outside the limits of the City of Woodland, about two miles north of the Interstate 5 freeway and one mile west of Road 102, in Section 22, 23, and 26, T10N, R2E, MDB&M, as shown in Attachment A. The area corresponds to Yolo County Assessor's Parcel Numbers: 027-250-051, 027-350-011, 027-250-191, 027-250-061, 027-210-181, and 027-210-071. The 230 acres containing the plant includes 130 acres of irrigated crop fields. The sale of the property to the Discharger did not include an additional 238 acres of land approximately 1.2 miles to the southeast of the facility that contains irrigated crop fields, several unlined ponds and a closed beet pulp landfill.
3. The Discharger submitted a Report of Waste Discharge dated 16 December 2002 requesting an owner/operator name change for previous WDRs Order No. 5-01-264. Since the previous WDRs provided requirements for portions of the facility located on the additional property that was not purchased by the Discharger (as described in Finding No. 2, above), a revised order is necessary that does not include requirements for those portions of the facility. The previous order also provided requirements for discharge of wastewater generated from non-contact cooling water associated with air compressors, periodic boiler blowdown, and periodic cleaning of packaging equipment and general cleaning of the facility. The Discharger has reported that the waste discharge has been discontinued and that waste discharge from this facility is no longer anticipated. This Order rescinds previous Order No. 5-01-264 as described in later Findings of this order.
4. The source of much of the information contained in the findings of this order is from reports submitted by the previous owner/operator and has been carried over from previous WDRs Order No. 5-01-264. This information and information submitted by the Discharger is used in part as the basis for the requirements of this Order.
5. Prior to the end of 2000, the former owner/operator generated wastewater from the sugar

manufacturing process that was discharged to land at an average rate of 2.6 million gallons per day (mgd). The primary waste streams were generated from beet “washwater” and from slurried precipitated calcium carbonate (PCC). These materials were managed in the following areas of the property owned by the Discharger, and include:

- (a) mud settling ponds;
- (b) PCC ponds;
- (c) PCC waste piles; and
- (d) irrigated cropland

at locations shown on Attachment B. The former owner/operator reported that a third party contractor has purchased the PCC that remains at the site, and that the purchaser is removing the PCC from the PCC ponds and piles and trucking it off-site for use as a soil stabilizer for agriculture and construction projects. This Order continues to provide requirements for removal of PCC from the PCC ponds and piles, as well as requirements for characterization and closure of the mud ponds, PCC ponds and PCC piles.

#### **SITE DESCRIPTION**

6. The site is on, and adjacent to, agricultural land with flat topography. The site elevation is approximately 45 feet above mean sea level (MSL). The Discharger has reported that the agricultural portion of the property will be farmed to wheat, tomatoes, corn, safflower, and other crops. Since it is near the City of Woodland, the site is close to a variety of uses, including agricultural industry, light industry, commercial, housing, and transportation.
7. The Discharger has reported that most storm water will be retained on-site but that under some circumstances storm water will be discharged into the regional surface water drainage system ultimately flowing into the Yolo Bypass. The Discharger has also reported that they intend to submit a Notice of Intent for coverage under General Permit No. CAS000001 for Discharges of Storm Water Associated with Industrial Activities.
8. The site is underlain by alluvial soils consisting of interspersed sand, gravel and clay, forming a shallow and deeper water bearing zones. The shallow water bearing zone, which begins at about 10 to 15 feet below ground surface (bgs), has a low permeability and extends to about 60 feet bgs. The deeper water bearing zones begin about 70 feet bgs. Depth to groundwater in both the shallow and deep monitoring wells is approximately 15 to 25 feet bgs.
9. The beneficial uses of underlying groundwater are domestic, industrial, and agricultural supply.

#### **GROUNDWATER MONITORING**

10. As shown on Attachment B, eight monitoring wells are completed in the shallow water bearing zone. Screened zones are approximately 40 to 60 ft-bgs. The wells and their general location include:

MW-1, MW-9, MW-9A, MW-10, MW-11	Near PCC and mud ponds;
MW-12, MW-13	In irrigated field area;
MW-15	Background

11. Two monitoring wells are screened in a deeper zone, one downgradient from the PCC ponds (MW-1A), and one upgradient background well (MW-14). These wells are screened from approximately 70 feet to 100 feet bgs. Within one mile of the facility, there are at least 14 domestic wells and at least 30 agricultural and supply wells completed in deeper zones.
12. These WDRs require the Discharger to continue groundwater monitoring. Monitoring must continue to evaluate whether concentrations of inorganic constituents in wells downgradient from the former waste disposal areas (PCC ponds and piles) are decreasing since waste discharge in these areas was discontinued.
13. During October 1999, the former owner/operator conducted an investigation to characterize the quality of shallow background groundwater. Seven borings were advanced upgradient from the waste disposal areas of the site. Data reported by the Discharger from quarterly monitoring of background monitoring wells MW-2 and MW-15 is also available. The former owner/operator concluded that upgradient groundwater quality has been impacted by agricultural practices, which have elevated the concentration of total dissolved solids. The concentration of total dissolved solids (TDS) in groundwater at borings B-1, 2, 3, 5, 6, 7 and 8 and monitoring wells MW-2 and MW-15 ranges from 490 to 1,300 milligram per liter (mg/L) with an average concentration of 930 mg/L. Data from boring B-4 is not considered a representative background location because it is immediately downgradient from a former wastewater disposal area (irrigated field).

#### **WASTE REMOVAL AND CHARACTERIZATION**

14. The previous owner/operator reported that there is approximately 201,000 tons of PCC remaining at the facility as of June 2002. Data submitted by the previous owner/operator indicates that the PCC in the PCC ponds and piles is a threat to water quality due to concentrations of soluble salt constituents, particularly bicarbonate. These WDRs continue to include a time schedule for the Discharger to remove all PCC from the site and to characterize any remaining materials in the mud and PCC ponds and the PCC storage areas (piles) to determine their potential threat to water quality. Based on these findings, the Discharger may propose remediation and/or closure alternatives for these facilities. A schedule for workplan development, sampling, reporting and subsequent activities, as needed, is detailed herein. The previous owner/operator submitted a workplan to collect and analyze confirmation soil samples from the PCC ponds, storage areas and mud ponds. The workplan was approved by Board staff in a letter dated 10 July 2002. This

Order requires the Discharger to implement the tasks outlined in the workplan as approved.

### **RESCISSION OF PREVIOUS ORDER NO. 5-01-264**

15. This Order rescinds previous WDRs Order No. 5-01-264. As mentioned in earlier findings of this Order, the previous Order provided requirements for former waste discharge facilities including the former wastewater ponds, tailwater ponds, closed beet pulp landfill and the irrigated fields located on the property to the southeast of the property owned by the Discharger. This Order does not contain any requirements for these facilities since the Discharger does not own the property on which they are located. Information about these facilities and their potential threat to water quality is provided in the findings below.
16. Prior to 1987, waste solids from beet processing were disposed of in an unlined landfill near the wastewater ponds. The beet pulp landfill was closed during 1989 in accordance with the regulations contained in Subchapter 15. Closure documentation for the landfill is presented in the 20 December 1989 *Final Landfill Closure* report submitted by Spreckels Sugar Company.
17. Adjacent to the closed beet pulp landfill are five former wastewater ponds. Four of these ponds (the "old" wastewater ponds) were used as settling ponds and contain mud and sediments. These ponds operated prior to construction of the mud ponds and the clarifier. The plant wastewater, including the mud from beet washing, was discharged to these ponds. The fifth wastewater pond was similar to the other four and was aerated to control odors. Spreckels Sugar Company submitted data that indicates that materials within these ponds are not designated wastes. Therefore, no further action is required at these ponds.
18. The tailwater ponds were used for retention of excess irrigation water from the irrigated fields, as necessary. Tailwater from the irrigated fields, if any, was normally returned by pumps to the irrigation ditches prior to entering the tailwater ponds.
19. Wastewater from the wastewater ponds was pumped and/or conveyed in irrigation canals to nearby fields for crop irrigation. The crops grown in the irrigated fields included sugar beets, safflower, winter wheat and corn.
20. Groundwater monitoring at monitoring wells located near each of the facilities described in Finding Nos. 15 through 19 indicates that they have not impacted water quality. The ranges of concentrations of constituents-of-concern at these monitoring wells are very similar to those at background locations for the area. Background data was obtained from regular monitoring of former background monitoring well MW-2 and from one time samples collected four borings (B-5 through B-8). This information indicates that these facilities are not a significant threat to water quality. Therefore, continuing waste discharge requirements for these facilities are not necessary.

### **CEQA AND OTHER CONSIDERATIONS**

21. The action to revise WDRs for the facility is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Title 14, CCR, Section 15301.
22. This Order implements the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fourth Edition.
23. The Board has notified the Discharger and interested agencies and persons of its intention to revise the WDRs for this facility.
24. In a public hearing, the Board heard and considered all comments pertaining to this facility and discharge.
25. Any person adversely affected by this action of the Board may petition the State Water Resources Control Board to review the action. The petition must be received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED that Order No. 5-01-264 is rescinded and that Sugarland Farms, LLC and their agents, successors and assignees, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

**A. DISCHARGE PROHIBITIONS**

1. The discharge of any wastes onsite is prohibited.
2. The discharge of wastes to surface waters or surface water drainage courses without WDRs that allow such discharge, is prohibited.
3. The offsite discharge of liquid or solid wastes, except for discharges to an authorized disposal facility, or for use as an agricultural soil amendment (or other beneficial reuse) that is not a threat to water quality is prohibited.

**B. SPECIFICATIONS**

1. Each facility groundwater monitoring well shall be locked to prevent unauthorized access and shall be equipped with a watertight well cap at the top of the well casing to prevent surface water infiltration in the event that the well is submerged during periods of flooding.

**C. PROVISIONS**

1. The Discharger shall comply with attached Monitoring and Reporting Program No. R5-2003-0047 and the Standard Provisions and Reporting Requirements dated 1 March 1991 which are incorporated into and made part of this Order.

2. The Discharger shall submit all reports required by this Order pursuant to Section 13267 of the California Water Code.
3. The Discharger shall complete the following activities and submit the following Technical Reports related to PCC removal and PCC and mud pond closure as follows:

Mud Ponds:

- a) By **15 June 2003** complete and submit a report that presents the results of the mud pond confirmation sampling and an interpretation of the data that compares the results to background quality, and assesses the need to remediate and/or close the ponds in accordance with the workplan approved by Board staff on 10 July 2002. If applicable, the report shall also discuss any soil overexcavation performed to remove additional impacted native material.

PCC Ponds & Waste Pile Areas:

- b) By **15 December 2004** complete and submit a report that documents that all PCC has been removed from the confines of the PCC ponds.
  - c) By **15 August 2005** complete and submit a report that presents the results of the PCC pond confirmation sampling and an interpretation of the data that compares the results to background quality, and assesses the need to remediate and/or close the ponds in accordance with the workplan approved by Board staff on 10 July 2002. If applicable, the report shall also discuss any soil overexcavation performed to remove additional impacted native material.
  - d) If determined to be necessary by Board staff following review of the PCC pond confirmation sampling report, a schedule will be proposed for remediation and/or closure activities.
  - e) By **15 December 2006** complete and submit a report that documents that all remaining stockpiled PCC has been removed from the storage area.
  - f) By **15 August 2007** complete and submit a report that presents the results of the PCC storage area confirmation sampling and an interpretation of the data that compares the results to background quality, and assesses the need to remediate and/or close the storage area. If applicable, the report shall also discuss any soil overexcavation performed to remove additional impacted native material.
4. The Discharger may be required to submit technical reports as directed by the Executive Officer.
  5. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the state Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for



compliance with this Order or with MRP No. R5-2003-0047, as required by Section 13750 through 13755 of the California Water Code.

6. In the event of any change in control or ownership of land or waste discharge facilities presently described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
7. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
8. The Board will review this Order periodically and will revise requirements when necessary.
9. A copy of this Order shall be kept at the facility for reference.
10. The Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 14 March 2003.

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THOMAS R. PINKOS, Executive Officer